



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,491	01/09/2004	David W. Gohl	1847US01	6176
43896	7590	01/08/2008		
ECOLAB INC. MAIL STOP ESC-F7, 655 LONE OAK DRIVE EAGAN, MN 55121			EXAMINER DOUYON, LORNA M	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			01/08/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/754,491

**Applicant(s)**

GOHL ET AL.

**Examiner**

Lorna M. Douyon

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,10,11,13-21 and 23-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,10,11 and 13-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 29, 2007 has been entered.
2. Claims 1-2, 4, 6, 10-11, 13-21, 23-34 are pending. Claims 23-34 are withdrawn from consideration as being drawn to nonelected claims.
3. The rejection of claims 1-2, 4, 10-11, 13, 15, 20 and 21 under 35 U.S.C. 102(b) as being anticipated by Cornelissens (GB 2,000,177) is withdrawn in view of Applicants' amendment.
4. The rejection of claim 6 under 35 U.S.C. 103(a) as being unpatentable over Cornelissens as applied to the above claims is withdrawn in view of Applicants' amendment.
5. The rejection of claims 1-2, 4, 6, 13, 15, 20 and 21 under 35 U.S.C. 103(a) as being unpatentable over Ruck (US Patent No. 4,388,077) in view of Reinwald et al. (US Patent No. 4,118,189) is withdrawn in view of Applicants' amendment.

Art Unit: 1796

6. The rejection of claim 14 under 35 U.S.C. 103(a) as being unpatentable over Cornelissens, or Ruck in view of Reinwald, as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597) is withdrawn in view of Applicants' amendment.

7. The rejection of claims 16-19 under 35 U.S.C. 103(a) as being unpatentable over Cornelissens, or Ruck in view of Reinwald as applied to the above claims, and further in view of Barnes (US Patent No. 4,988,363) is withdrawn in view of Applicants' amendment.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-2, 4, 6, 10-11, 13-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, line 6, the limitation "pH...to about 5" is nowhere supported in the specification and is therefore considered as new matter. The specification on page 12, lines 26-28 discloses a pH "between about 2 and about 8, between about 2 and about 6, and between about 2 and

Art Unit: 1796

about 4", not "about 5". Although a "pH to a level of about 5" is disclosed on page 2, line 4, this citation refers to a sour step of the prior art. The remaining claims, being dependent upon claim 1, are rejected as well.

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1-2, 6, 10-11, 13, 15, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinlein et al. (4,093,417), hereinafter "Heinlein".

Heinlein teaches a method for washing textile material including first prewashing the textile material in an acid wash solution having a pH below 6.5 whereby incrustations remaining on the textile material formed in a previous main wash cycle are dissolved in the prewash cycle and then washing the material in a main wash cycle with a phosphate-free alkaline liquor whereby incrustation form on the textile material for removal during a second prewash cycle (see abstract). The pH values of the acid prewash can attain values of 2 or less (see col. 3, lines 20-23). The prewash acid detergent is used only in the first 1-3 minutes of the prewash cycle and then adding the alkaline main detergent to the prewash cycle (see col. 4, lines 60-66; col. 5, lines 50-55). In commercial laundries the washing time determines the profitability, and here it may be of advantage to wet the dirty wash at first neutral or even slightly alkaline in order to saturate the fibers and protein stains, and the carbonate incrustations on the

Art Unit: 1796

fiber surface are subsequently reliably dissolved in a short (1-3 minutes) acid bath (see col. 5, lines 15-21). After the textile material has been dipped into the preliminary bath, it is brought into the first main wash cycle (see col. 5, lines 11-14), which main cycle is alkaline as described above (i.e. in the abstract). Bleaching agents can also be used without any difficulties, like sodium perborate, and of particular advantage is the addition of sodium percarbonate to the detergent of the main wash cycle, wherein this bleaching agent enhances the formation of readily soluble carbonate incrustations on the material to be treated (see col. 4, lines 35-41; claim 11). The customary brighteners as well as perfumes can also be used (see col. 4, lines 42-46). It is also possible to mix the sodium bisulfate (acidification agent) with 5% percarbonate or perborate, and the powder obtained has the additional advantage of oxygen bleaching during the saturation or wetting process (see col. 27-31). The acid prewash detergent may contain an alkaline solution in microcapsulated form (see col. 6, lines 24-25). The main wash cycle detergent comprises mainly soda, and preferably nonionic or anionic substances, also soap, if desired (see col. 2, line 66 to col. 3, line 15). The wash liquor of the first main wash cycle is the first wash liquid flowing from the machine into the drain (see col. 7, lines 21-23). Heinlein, however, fails to specifically disclose washing the laundry with alkaline, thereafter with an acid, then alkaline.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of washing the laundry with alkaline, thereafter with an acid, then alkaline because Heinlein teaches in col. 5, lines 15-21 that in commercial laundries it may be of advantage to wet the dirty wash at first slightly

Art Unit: 1796

alkaline in order to saturate the fibers and protein stains prior to the acid bath, then it is brought into the first main alkaline wash cycle as disclosed in col. 5, lines 11-14.

12. Claims 1-2, 4, 6, 10, 13, 15, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindner et al. (US Patent No. 3,131,991), hereinafter "Lindner".

Lindner teaches a process for washing and bleaching articles in a washing medium which comprises applying to the article to be treated liquid water-containing concentrate in the form of (a) an acid component concentrate having an acid stabilized active oxygen-containing compound and an acid-stable organic washing agent in aqueous acid medium, (b) an alkaline component concentrate having an alkaline-stable organic washing agent and an alkaline reacting compound in aqueous alkaline medium, the amount of alkaline reacting compound being adjusted to render the overall washing medium formed of sufficient pH for effecting the washing and bleaching treatment (see claim 1), wherein the alkaline component liquid water-containing concentrate is added to the washing medium for the article to be treated prior to the adding of the acid component liquid water-containing concentrate (see claim 17; col. 2, lines 66-69). The acid and alkaline concentrates may be introduced into the wash water in any desired ordinal sequence (see col. 7, lines 8-15). After the washing machine has been loaded with the washing material (laundry) and the required quantity of water added, the packet containing the alkali liquid concentrate is emptied into the drum, whereupon after a few revolutions of the drum, the acid liquid concentrate is emptied from the other packet into the washing liquid (see col. 7, lines 49-55). It is understood that the washing machine

Art Unit: 1796

has draining and rinsing steps. The alkaline reacting compound of the alkaline component concentrate is suitably an alkali, such as caustic alkali, alkali carbonate or alkali meta-silicate (see col. 2, lines 49-53). The acid concentrate will preferably possess pH values between 2.5 and 5 whereas the alkaline concentrate will be maintained such that the acid constituents will be effectively neutralized (see col. 3, lines 35-39), i.e., pH between 7.5 and 11 (see col. 2, lines 54-58; col. 3, lines 18-19). The acid component concentrate is made up of per-compounds such as for example concentrated aqueous hydrogen peroxide solution, or adducts of hydrogen peroxide with alkali borates, alkali carbonates, and the like, and the concentrate further contain organic wash actives of the nonionic and/or anionic type (see col. 3, lines 45-62). The acid and/or alkaline concentrates may be separately charged with various other conventional ingredients useful in washing procedures, for example, disinfecting agents, optical brighteners, perfumes, etc. (see col. 4, lines 59-68). Lindner, however, fails to specifically disclose the steps of washing the laundry with alkaline, thereafter with an acid, then alkaline.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of washing the laundry with alkaline, thereafter with an acid, then alkaline because Lindner teaches in claim 17 and col. 2, lines 66-69 that the alkaline component liquid water-containing concentrate is added to the washing medium for the article to be treated prior to the adding of the acid component liquid water-containing concentrate, and that the acid and alkaline concentrates may be



Art Unit: 1796

introduced into the wash water in any desired ordinal sequence as disclosed in col. 7, lines 8-15.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinlein or Lindner as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597), hereinafter Werdehausen.

Heinlein or Lindner teaches the features as described above. Heinlein or Lindner, however, fails to disclose a halogen bleach like chlorinated trisodium phosphate or sodium hypochlorite.

Werdehausen teaches the equivalency of alkali metal perborates and percarbonates with chlorinated trisodium phosphate or alkali metal hypochlorite as bleaching agents in a similar method (see claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborates or percarbonates of Heinlein or Lindner with chlorinated trisodium phosphate or alkali metal hypochlorite because the substitution of art recognized equivalents as shown by Werdehausen is within the level of ordinary skill in the art.

14. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinlein or Lindner as applied to the above claims, and further in view of Barnes(US Patent No. 4,988,363).

Art Unit: 1796

Heinlein or Lindner teaches the features as described above. Heinlein or Lindner, however, fails to specifically disclose peroxyacids like peroxyoctanoic acid, or an activator.

Barnes teaches the features as described above. In particular, Barnes teaches the equivalency of perborates or percarbonates with organic peroxyacids (which are also activators), which include peroxyoctanoic acid, as bleaching agents (see col. 6, lines 30-35; see col. 5, lines 43-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborate or percarbonate of Heinlein or Lindner with organic peroxyacids like peroxyoctanoic acid because the substitution of art recognized equivalents as shown by Barnes is within the level of ordinary skill in the art.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lorna M. Douyon/  
Primary Examiner  
Art Unit 1796